Overflow Protected First-In First-Out Architecture

ABSTRACT OF THE DISCLOSURE

[0083] An electronic device (10). The device comprises an input (16_I) for receiving successive data words, wherein each data word of the successive data words comprises a plurality of bits. The device also comprises a memory structure (12) comprising a plurality of memory word addresses, wherein each memory word address corresponds to a storage structure operable to store a data word having the plurality of bits. The device also comprises control circuitry (14, 16), operable during a non-overflow condition of the memory structure, for writing successive ones of received data words into respective successive ones of the memory word addresses. Finally, the device also comprises control circuitry (14, 16), operable during an overflow condition of the memory structure, for writing each data word in successive ones of received data words across multiple ones of the memory word addresses